

Amendments to the Claims

Please cancel claims 10, 18 and 26 without prejudice. Please amend the remaining claims as shown below in the List of Claims.

Listing of Claims

1-8. (Cancelled)

9. ¹ (Currently amended) A process for obtaining a purified gas by removing polysulfanes from crude gas formed during the production of hydrogen sulfide, wherein said crude gas comprises greater than 80% by volume of H₂S and 100-2000 vpm of polysulfanes of the formula H₂S_n, wherein n = 2-8, said process comprising:

- a) passing said crude gas through a wash system where said crude gas is brought into contact with a wash solution comprising water or methanol; and
- b) collecting said purified gas from the wash solution of step a).

10. (Cancelled)

2 11. ¹ (Currently amended) The process of ~~claim 10~~ claim 9, wherein said polysulfanes are present in said crude gas at 400-1500 vpm.

3 12. ¹ (Previously presented) The process of claim 9, wherein said wash system is a jet washer.

4 13. ¹ (Previously presented) The process of claim 9, further comprising a second wash step in which the purified gas produced in step a) is passed through a counter-current washer comprising an aqueous or methanolic solution.

5 14. ¹ (Previously presented) The process of claim 9, further comprising a second wash step in which the purified gas produced in step a) is passed through an adsorber bed.

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15. (Previously presented) The process of claim ¹8, wherein relative to said crude gas, the polysulfanes in said purified gas have been reduced by 50-99.5%.
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16. (Previously presented) The process of claim ¹9, wherein said process is carried out at a temperature of 0-150°C.
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17. (Currently amended) A process for obtaining a purified gas by removing polysulfanes from crude gas formed during the production of hydrogen sulfide, wherein said crude gas comprises greater than 80% by volume of H₂S and 100-2000 vpm of polysulfanes of the formula H₂S_n, wherein n = 2-8, and wherein said process comprises comprising:
- a) passing said crude gas through a wash system comprising an aqueous or methanolic solution containing 0.5-20 wt% of an alkali or alkaline earth hydroxide or oxide; and
 - b) collecting said purified gas from the aqueous or methanolic solution of step a).
18. (Cancelled)
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19. (Previously presented) The process of claim ⁸17, wherein said polysulfanes are present in said crude gas at 400-1500 vpm.
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20. (Previously presented) The process of claim ⁸17, wherein relative to said crude gas, the polysulfanes in said purified gas have been reduced by 50-99.5%.
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21. (Previously presented) The process of claim ⁸17, wherein said wash system is a jet washer and said process further comprises a second wash step in which the purified gas of step a) is passed through either: a counter-current washer comprising an aqueous or methanolic solution; or an adsorber bed.
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22. (Currently amended) A process for obtaining a purified gas by removing polysulfanes from crude gas formed during the production of hydrogen sulfide, wherein said crude gas comprises greater than 80% by volume of H₂S and 100-2000 vpm of polysulfanes

of the formula H_2S_n , wherein $n = 2-8$, and wherein said process comprises comprising:

- a) passing said crude gas through a wash system comprising an aqueous or methanolic solution containing 1-20 wt% of a compound selected from the group consisting of:
 - i) an organic amine of the formula $(C_nH_{2n+1})_xNH_y$, where $n = 1-3$, $x = 2$ or 3 , and $y = 0$ or 1 ;
 - ii) an amino alcohol of formula $(C_nH_{2n+1}O)_xNH_y$, where $n = 1-3$, $x = 2$ or 3 , and $y = 0$ or 1 ; and
 - iii) ammonia;
- b) collecting said purified gas from the aqueous or methanolic solution of step a).

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23. (Previously presented) The process of claim 22, wherein said compound is an organic amine of the formula $(C_nH_{2n+1})_xNH_y$, where $n = 1-3$, $x = 2$ or 3 , and $y = 0$ or 1 .

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24. (Previously presented) The process of claim 22, wherein said compound is an amino alcohol of formula $(C_nH_{2n+1}O)_xNH_y$, where $n = 1-3$, $x = 2$ or 3 , and $y = 0$ or 1 .

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25. (Previously presented) The process of claim 22, wherein said compound is ammonia.

26. (Cancelled)

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27. (Previously presented) The process of claim 22, wherein relative to said crude gas, the polysulfanes in said purified gas have been reduced by 50-99.5%

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28. (Previously presented) The process of claim 22, wherein said wash system is a jet washer and said process further comprises a second wash step in which the purified gas of step a) is passed through either: a counter-current washer comprising an aqueous or methanolic solution; or an adsorber bed.